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<b>Notice of Allowability</b>	Application No.	Applicant(s)	
	10/762,302	HAYASHI ET AL.	
	Examiner	Art Unit	
	Robert Sellers	1712	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the preliminary amendment filed 23 January 2004 and the election filed 1 February 2006.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>8/25/2004</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                                | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

The following is an examiner's statement of reasons for allowance:

1. Group I, claims 1 and 3-10 (claim 11 was erroneously included in Group I) have been elected in the response filed February 1, 2006. Claims 2 and 11-17 are hereby reinstated and are allowable for the reasons espoused hereinbelow since the contain the same limitations as independent claim 1 with the additional requirement wherein the cured resin film is an insulating layer within a printed wiring board.
2. The closest prior art to Hayashi et al. Patent No. 6,410,145 and Japanese Patent Nos. 11-35916 and 11-100562 set forth a film or an insulating adhesive layer for a printed wiring board comprising an epoxy resin such as the triglycidyl ether of tris-(hydroxyphenyl methane of claim 2 (Hayashi et al., col. 1, line 64 to col. 2, line 21), a curing agent such as the phenol novolak of claim 4 (Hayashi et al., col. 6, Table 1, Examples 1-4), a polyethersulfone thermoplastic resin of claim 5, and a filler such as the silica of claim 6 (Hayashi et al., col. 4, lines 54-55, Japanese '916, page 4, paragraph 10, line 1 and Japanese '562, page 3, paragraph 10, line 1).
3. The claimed "filler content in at least one of the surface regions on the cross-section of the film is less than the filler concentration in the central region in lone independent clam 1, lines 3-4 is not recited.

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4. Ohta et al. Patent No. 5,641,997 (Figure 5 and col. 10, lines 61-65) depicts an encapsulating layer prepared from an epoxy resin such as a triglycidyl ether of tris-(hydroxyphenyl methane (col. 3, lines 49-57 and cols. 7-8, lines 27-43, formula (2)), a curing agent such as a novolak phenol resin (col. 8, line 54) and a filler such as silica (col. 9, lines 11-13). The filler additive distribution is illustrated with a higher concentration at the surfaces as opposed to the claimed larger filler concentration in the central region.

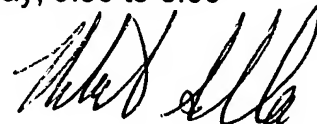
5. Kami et al. Patent No. 6,573,016 reports an electrophotographic photoconductor with a photoconductive layer derived from an epoxy binder resin, a charge transporting polymer and  $\alpha$ -alumina (Figure 10 and col. 14, lines 26-29 and 40) "wherein the concentration of the inorganic filler in the photoconductive layer decreases from the outwardly facing surface thereof to the opposite surface thereof." The motivation for the gradient  $\alpha$ -alumina concentration is to obtain a copy with clear contrast and image density, no fogging after repeated usage and good durability (col. 35, lines 19-38). The film and insulating adhesive layer of Hayashi et al. and the Japanese patents employed in a printed wiring board do not pertain to the properties provided by the photoconductive layer of Kami et al.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled

"Comments on Statement of Reasons for Allowance."

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rs 3/17/2006

Monday to Friday, 9:30 to 6:00



ROBERT E.L. SELLERS  
PRIMARY EXAMINER